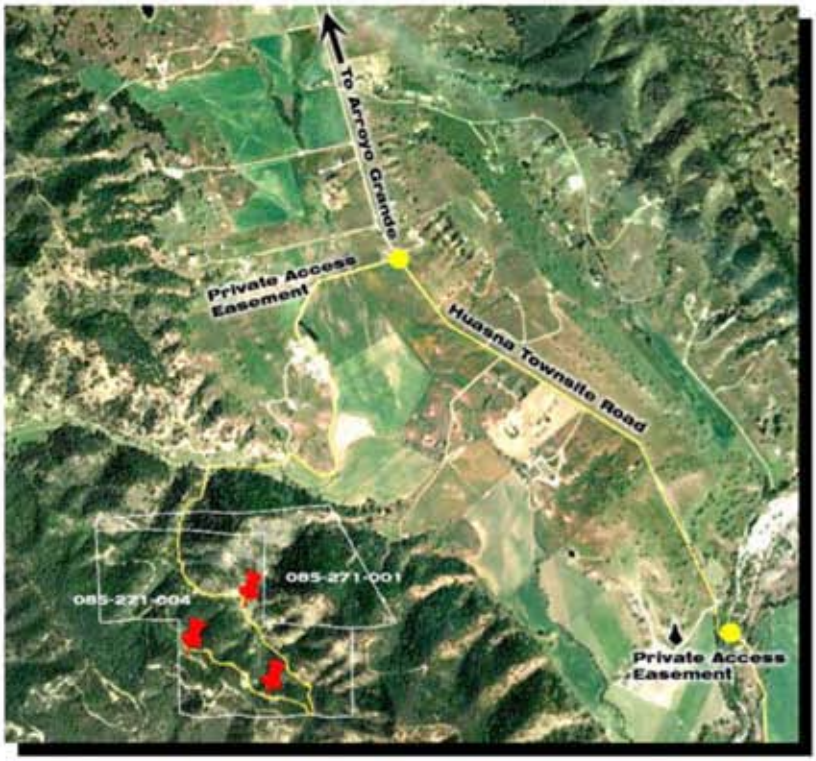
Response to Information Hold Letter Dated August 20, 2009

Huasna Valley Oil Exploration and Production Project



Prepared for:

San Luis Obispo County Planning and
Building Department
County Government Center
San Luis Obispo, CA 93408

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September 24, 2009

O A S I S
LANDSCAPE
ARCHITECTURE
AND PLANNING

24 September 2009

Mr. John McKenzie, Senior Environmental Planner
DEPARTMENT OF PLANNING & BUILDING
COUNTY OF SAN LUIS OBISPO
County Government Center
San Luis Obispo, CA 93408

RE: DRC2009-00002 – EXCELARON, LLC CONDITIONAL USE PERMIT
RESPONSE TO INFORMATION REQUEST

Dear John,

In response to your correspondence dated August 20, 2009, we have reviewed the list of requested information and respectfully provide the following responses. We have restated your request, followed by our response.

1. Please have a Hazardous Site Assessment (starting with a Phase I report) prepared by a qualified individual. This request is due to the previous permit not meeting conditions and the incomplete removal/ closure of the test wells. In conferring with other potential permitting agencies (DOGGR, RWQCB, Environmental Health, County Code Enforcement) the current condition of the previously used well pads is in violation of the previous county conditions of approval. When such conditions exist and a land use permit is proposed, no application "shall be approved, except where the application incorporates measures proposed by the applicant to correct the violation, and correction will occur before establishment of the new proposed use". After reviewing the various elements potentially out of compliance, all but one (see #2 below) were preliminarily identified as having very low risk to negatively affect off-site human health in the near term (e.g., containers and tanks left on-site, above-ground piping, potential drilling mud sumps near well heads, etc.). Therefore, completion of the HSA was determined appropriate to assess the improperly vacated site. Please note any recommended remedial work will need to occur prior to new drilling.

Based upon their experience with oil field operations, we recently retained Stantec (formerly Secor) to fulfill your request for the preparation of a Phase I Environmental Site Assessment, dated September 23, 2009. Please see the attached document. With reference to the previous permit, we have consulted with our legal counsel, Patrick G. Mitchell, Downey/Brand, LP who has prepared a response to the balance of your comments. Please see the attached correspondence dated September 15, 2009 addressed to County Counsel, Tim McNulty.

2. With regards to the existing seep adjacent to the Shipping Site area, please submit the following:
    a. Completion of a water quality analysis by a qualified individual that includes TPH (hydrocarbon chain) and B-techs panels to help determine the potential hazard of this hydrocarbon source.

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We requested that the project's certified hydrogeologist, Timothy S. Cleath, Cleath-Harris Geologists, Inc. review and respond to item 2.a. Please see the attached correspondence and related laboratory results from Creek Environmental Laboratories, Inc. The seep was sampled and analyzed and no TPH or BTEX were found. A water well located to the west on APN 085-271-0214 was also sampled and analyzed. As with the seep, no THP or BTEX were detected. We have requested permission from the owner of the water well located closest to the project site (APN 085-271-025) to sample and analyze this well. We do not have confirmation to sample the well as of this writing.

> b. Conduct one or more of the following to determine oil well presence/absence, hand auger down to seven feet from surface; use of a magnetometer over the seep area, or use ground penetrating radar over the seep area. If well determined present, subsequent trenching around well head (or other comparable method approved by County/ DOGGRs) shall be performed to determine source of water/leak. County staff and DOGGRs shall be notified prior to work beginning with the intent to observe the outcome.
>
> The above requirements are based on the following: the need to establish if this is a man-made or natural seep; determine the potential toxicity of the seep; if man-made, to begin working with the appropriate agencies to determine appropriate remedial measures. While Cleath's report has identified the seep as being associated with previous well drilling efforts (and not a natural seep as stated in the previous application), in speaking with DOGGRs, additional information is needed to document that the seep is associated with a leaking well head and not a naturally-caused seep.

Again, we refer you to the correspondence prepared by Downey/Brand to County Counsel, dated September 15, 2009, in response to your request to physically examine the existing seep.

3. Please have a county-approved hydrogeologist 1) determine the best available water wells to use for monitoring purposes of groundwater constituents (e.g., well is down gradient from the proposed oil well locations, etc.), and 2) obtain water quality samples from these water wells that test for TPH (hydrocarbon chain) and B-techs panels to help determine the potential for hydrocarbons. This will help to establish a groundwater baseline condition. This shall be done prior to DOGGRs proposed remedial work later this year.

Please see the response to 2.c. above regarding the determination of the most appropriate water wells to monitor and the results from sampling a well located to the west of the project site. Please note that Mr. Cleath is recommending that, in addition to TPH and BTEX, a general mineral analysis be included for any future monitoring activities.

4. Please identify the other two local refineries referenced (Santa Maria, Nipomo Mesa) and their respective truck haul routes.

A maximum of six (6) truck tanker trucks, with a 7000-gallon average capacity per truck, will service the site daily to transport product. The truck haul route would include trucks exiting the site, traveling south on Huasna Townsite Road to the end of the county maintained portion, then

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on to existing ranch roads on the Porter Ranch south to Alamo Creek Road to Highway 166, then west to Highway 101, and its final destination. Tanker trucks will access the site via the same route. All produced oil will be transported by tanker truck from the onsite shipping point to an offsite refinery (e.g., Nipomo, Santa Maria, Oxnard). A refinery cannot be identified prior to established production because a multitude of variables will determine the most appropriate refinery based upon the following: 1) production quantity and quality; 2) available refinery capacity; and 3) associated traffic related impacts. While a specific refinery has not been identified, the air quality analysis is based upon transporting oil to a refinery in Oxnard, California, which we believe constitutes a reasonably foreseeable alternative (*See Supplement to the Application July 22, 2009 – Section 2.3.2, page 5 and 2.4.6.1, page 12*)

Based upon comments from the public, the two closest refineries to the project site (Conoco Phillips Nipomo Mesa, and Greka Santa Maria) may present traffic and circulation challenges, therefore the importance of analyzing alternative refinery locations in the EIR. Attachment 'A' depicts the proposed haul routes to the three (3) identified refineries however, Excelaron is amenable to alternative routes in order to lessen any potentially significant impacts related to truck traffic and circulation.

5. One permanent supervising employee has been identified to be on site at all times. Please describe if there will be any other part-time employees or contract help to conduct any post-construction work (i.e., operational or maintenance) on a regular basis. If there will be additional personnel, please specify in what capacity and how often it is expected they will be on-site.

Once the permanent operation is fully functional, one (1) employee per 8-hour shift will supervise the project site on a 24-hour/7days/week basis. The supervising employee will oversee all operations and shipping functions, and would notify the proper authorities in case of emergency. (*See Supplement to the Application, July 22, 2009 – Section 2.4.6.1, page 12*)

Permanent employees of Excelaron's operations will be required to be competent in routine maintenance of the facilities, management of oil field operations, safety procedures, etc. Occasionally, additional contractors may be needed for post construction work however; it is difficult to speculate what those needs may be or the frequency of those events.

Service contractors including propane, water, and port-a-potty services will visit the site on a regular basis. The frequency of those services are identified in the traffic report submitted as part of the application supplement. No additional truck trips are expected. (*See Orosz Engineering Inc. Traffic Analysis, May 15, 2009 – Enclosure F*)

6. Please provide the anticipated amount of production water to be handled by the proposed re-injection well. If there is a substantial increase in production water (e.g. higher than anticipated ratio of water to oil, etc.) that exceeds reinjection well capacity, please describe how that would be handled. Please include in that explanation the process used should this

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well stop working, or related piping not function properly, and how excess produced water would be handled in those situations.

The processing facilities have been designed to accommodate a water disposal rate of 1,128 barrels of water per day (BWPD). This disposal rate condition occurs under the proposed future twelve (12) well scenario and assumes a water cut ratio of 67%. Given the small amount of past production from this field and production from similar fields and formations, a water cut ratio of 67% is a very conservative estimate and the true water cut may be much lower. (*See Cannon Facility Engineering Report, July 1, 2009 – page 14*)

Given the conservative estimate for water cut ratio under the maximum field development scenario, it is unlikely that more water will be produced than has been anticipated. Additionally, the California Department of Oil, Gas, and Geothermal Resources (CDOGGR) requires that injection/disposal wells be tested and proven to be capable of accepting the proposed disposal rate or water. Produced water, without much treatment and processing may be classified as a Class II fluid. Any injection of Class II fluids is monitored under the CDOGGR's *Underground Injection Control Program*. The disposal well will be fitted with two (2) injection pumps for redundancy purposes and the well(s) location will require minimal piping from the water tank. (*See Cannon Facility Engineering Report, July 1, 2009 – page 14*)

If the wastewater tank cannot be emptied at a sufficient rate, temporary shut-in of the facilities may be required. This would require the production of crude oil to halt until such time as the disposal problem has been remedied.

7. As the cell phone reception is expected to be unreliable in this area, please describe the employee's means of communication for an emergency or other need to contact someone out of the area, or measures proposed to ensure reliable reception at the shipping site.

Hand held walkie-talkies will serve as the means of communication between onsite personal during the Exploration and Testing Phase. Satellite phones will be purchased as a means for reliable communication with offsite persons. Once permanent production has been established, Excelaron may choose to establish a land line service to the Shipping Site.

8. Please either provide revised plans showing the location of an on-site septic system, or where in the UBC or UPC that allows for portable facilities to serve a permanent use. Per the Building Division's septic system expert, a portable facility is not an acceptable method for permanent employees. Please provide soil borings in an area with less than 20% slopes, away from any blue line creek, and that shows there is sufficient soil depth for such a system in the shipping site area.

Pursuant to discussions with Barry Tolle, EHS and as referenced in the Uniform Building Code § 29.02.1, the "trigger" for the requirement to construct a septic system (where hook up to a sewer system is not an option) is construction of a permanent structure. The project is not proposing any permanent habitable structures. Should the project move into the Production Phase, either a

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construction type trailer with tanks that can be pumped or portable toilets would be used. Verification of these alternative methodologies would be provided to the Building Department and/or Environmental Health Department.

9. Please identify what method(s) will be used of the three stated in your project description (fee, easement, on-site replanting) to mitigate the oak trees being impacted or removed. If on-site planting is proposed, substantial areas will need to be identified, as well as watering requirements for possibly 7 years. Such an area needs to be identified. Please also calculate water requirements and water source.

Excelaron requests that all oak tree mitigation be addressed through the in lieu fee program that provides monetary compensation to an oak woodland restoration/acquisition program or to the Wildlife Conservation Board. This request is a result of the limited amount of available, open land on the project parcels on which replacement trees have a chance to succeed. (*See Supplement to the Application, July 22, 2009 – Section 3.5.6, page 39*)

10. In reviewing the Mankins Tree & Road Plan, while it provides a total number for "impacted" and "to-be-removed" trees, when looking more closely at the proposed grading and relation to "bolded" and "non-bolded" trees, it makes little sense. The proposed grading shows that entire trees are within the area to be graded in multiple locations, a clear indication the tree would have to be removed to accomplish the proposed grading. Yet only two trees are identified for removal. Secondly some tree outlines are bolded and others not without an indication of why. A number of the nonbolded trees' driplines are well within the areas to be graded. Please provide revised plans that IDs which trees are to be removed and which will be impacted" Please also either remove bolding feature or explain intent and make sure it accurately matches plans.

The *Mankins Tree & Road Plan* ("Plan") was created to graphically represent the location of potentially impacted oak trees and identify potential areas of grading. The Plan was created by conducting detailed site reconnaissance surveys of the project site and by aerial LIDAR. The information was subsequently merged into one graphic. The merger of the survey data has caused some trees to remain in bold, while others are not. There is no distinction between the bold or non-bold trees. Additionally, as this is a graphic representation, the depicted tree size may not be related to the actual size of the tree.

A professional biologist from Sage Institute, Inc., with the proposed Plan in hand, walked the entire length of the road identifying and verifying potentially impacted oak trees within proposed grading areas and CalFire clearance zone. (*Please see Question 14*) That field data was correlated with the surveys and the quantity for impacted oak trees to be pruned and/or removed was verified.

The trees depicted on the Mankins Tree & Road Plan show the canopy of any oak trees within the proposed grading and CalFire vegetation clearance zones ("zones"). This does not imply that the entire tree and/or its trunk is located within those areas, only that the trees canopy extend into the

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proposed zones. The trees, located in the proposed grading areas but not identified for removal, are trees that have canopy that overhang into those zones and may therefore, need to be pruned. A professional biologist with Sage Institute, Inc. verified the species of oak trees and the quantity of trees to be pruned and/or removed.

It is noteworthy that the County makes no distinction between oak tree pruning and removal with respect to mitigation. Therefore, regardless of the distinction, "impacted" trees have been accounted for and will be subject to mitigation. Once entitled, a grading, drainage and erosion control plan will be submitted to the County that will again reflect what has been noted on the *Mankins Tree and Road Plan*.

11. Also, please identify the "Key Viewing Vegetation" to be protected from impacts/ removal for Well Pad #2.

All trees, mainly oaks, bordering the east perimeter of Well Pad 2 are considered "Key Viewing Vegetation". (*See Attachment B*) None of these trees are proposed for removal. Any trees within the CalFire clearance zone will be pruned to accommodate fire safety requirements, while protecting any potential for public exposure of the site. Due to the steep topography to the east of Well Pad 2, the existing shrubs and/or grasses are not considered key viewing vegetation, as they are located well below the pad elevation.

12. How will "Key Viewing vegetation" (which includes larger shrubs) be able to remain in place around well pad #2 based on the location of the wells and blending tank, given that CalFire will require 30 to 100-foot vegetation clearance? Plans already show 3O-foot clearance. If possible, please move 'highest risk" equipment as far from this area with the intent of being able to avoid fuel modification requirements by CalFire.

To clarify vegetative clearance limits around oil operations, well pads and roads, Excelaron previously met with Rick Swan, Battalion Chief Cal Fire. CalFire has also visited the proposed project site twice and driven the proposed traffic route. (*Please see the attached CalFire correspondence*)

The purpose of vegetative clearance limits around development is intended to create a defensible space. The 100-foot vegetative clearance does not require the complete removal of all vegetation around project components. Cal Fire has published guidelines for vegetative clearance in "*General Guidelines for Creating Defensible Space*"; adopted by the Board of Forestry and Fire Protection on February 8th, 2006 ("Guidelines"). The document states "…remove all surface fuels greater than 4" in height. Single specimens of trees or other vegetation may be retained provided they are well-spaced, well-pruned and create a condition that avoids the spread of fire to vegetation or to other buildings or structures." Based upon the Guidelines, and the site specific information provided by Rick Swan, oaks within this 30-foot clearance area will not be removed, but instead be pruned to Cal Fire standards (i.e., up to a height of six (6) feet).

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Cal Fire requires a vegetative clearance of 10 feet on either side of the proposed access roads. The proposed project will not require wholesale removal of oak trees. All oaks within the roadside clearance limits will be pruned to 6 feet in height and any overhanging branches will be trimmed to meet Cal Fire vertical clearance limits of 13 feet 6 inches. Excelaron will retain a qualified biologist or someone under the supervision of a qualified biologist to be onsite during all pruning activities.

As previously stated, the project will be completed in phases. Initially, four (4) wells will be drilled and tested to determine the economic feasibility of production. During the Testing Phase, and prior to the permanent installation of facility equipment, a 30-foot area of vegetative clearance will be created and maintained around well heads and tank farm facilities. Prior to commencement of the Testing Phase, Cal Fire will conduct an onsite inspection to make certain that sufficient defensible space has been created around project components.

Should the Testing Phase provide information that would warrant the installation of permanent facilities, (Production Phase) including pipelines and tank farm , the defensible space would expand an additional 30 to 70 feet beyond the initial clearance 30-foot area of clearance. This additional clearance area will include judicious removal of vegetation to decrease the fuel load and eliminate the potential for a fuel ladder. Generally, this would include removal of shrubbery directly under and adjacent to oak trees and thinning of shrubbery not directly adjacent to trees. This methodology (called “marbling”) requires no oak tree removal.

Any “hot work” (i.e., welding) will also be required to meet Cal Fire requirements. Vegetation will be cleared to a minimum of 10 feet on either side of the “hot work”. A minimum of two field workers will be required on site during “hot work”: one worker monitoring for sparks or small flames; the other performing the welding operation. Requisite equipment to be on site during all welding operations includes the following: shovel, fire extinguisher, and 5 gallon pressurized backpack containing water. It is noteworthy that “hot work” will predominately occur after the testing phase should permanent facilities be warranted.

All operating equipment on Well Pad 2 will be placed to minimize fire risk and exposure to the public.

13. The latest botanical report (Sage, 7l21l0g) identified leafy tarplant (Deinandra increscens ssp. follosa) as being a sensitive plant (CNPS Inventory of Rare and Endangered Plants of California - List 18.2 plant) found within the project boundaries. No information was provided on the general potential for success of the "scoop and drop" measure proposed, nor the potential for success in placing this topsoil on the undefined re-graded road banks. These deficiencies can be evaluated during the EIR consultant's peer review of this and other biological reports submitted.

The project’s biological consultant, David Wolff, Sage Institute, Inc. (SII) has prepared a letter report in response to your questions. To reiterate, the paniculate tarplant found on the Mankins

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and Porter ranches is a CNPS List 4 status, and given its wide distribution, impacts to this species is considered less than significant. Based upon SII's on site observations, the plant appears to readily colonize disturbed areas. These observations have led SII to suggest that the "scoop and drop" method of revegetation would be successful and provide adequate mitigation for the species. Please see attached correspondence dated August 31, 2009.

14. Please clarify that the Sage report evaluated CalFire clearance areas along access roads and around well pads. If this analysis did not, please submit revised report at a time when the leafy tarplant is identifiable.

Sage Institute, Inc. has provided a response to your inquiry regarding clarification of the extent of their on site survey for the CalFire clearance zone. Their surveys covered both the 30-foot and 100-foot clearance zone in the areas of proposed improvements.

15. During the Testing and exploration phase, please provide greater detail on the testing procedures, such as:
    a. Will there be importation of heated water to inject into the new well(s)? How much?

During the 6 month ± Testing Phase, each individual production well will be produced using the hot water flood enhanced oil recovery method. (*See Supplement to the Application, July 22, 2009 – Section 2.4.5.1, page 10*) However, when testing begins no stimulation (EORM) will be required to facilitate the initial production of each well. Testing will begin on each well with no stimulation in order to determine the well's capability prior to hot water stimulation. Subsequently, the primary produced water can be used for the initial hot water flood. There is no need to import water; particularly fresh water, for well stimulation. No additional truck trips are expected. In some Monterey reservoirs, fresh water can plug the fractures or inhibit flow due to swelling clays. It is unknown at this point in time if that characteristic is relevant to this reservoir.

The quantity of water needed for hot water flooding is restricted to the amount that each well bore and its surrounding geological formation can accept. Without the detailed geological information that will be provided during drilling, it is impossible to accurately quantify the amount of water that will be required.

    b. When extracting the oil/water mix, will there be a temporary facility to separate the two? What will be done with the oil (stored for a period? Loaded directly into tanker?)? What will be done with the produced water (reinjection well not proposed until production phase)?

Temporary Baker® tanks will service the production wells during the Testing Phase. These tanks will facilitate the natural emulsion separation of crude oil from any produced water. Any produced fluids will be stored in the temporary tanks until separation occurs or the tank requires emptying. The produced crude will be hauled offsite by the tanker trucks described in the traffic

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study and any excess produced water is proposed to be reused to facilitate the EORM process. (*See Orosz Engineering Inc. Traffic Analysis, May 15, 2009 – Enclosure D*)

> c. While it is understood the well drilling aspect will occur 24/7 until the proper depth of a well is achieved, what will be the hours of operation for other noise generating aspects of the testing phase (e.g., will all other activities using loud equipment (e.g., heating water, oil/water separating process, etc.) need to run between 10 pm and 7 am)? Can certain noise-generating activities be limited to between 7 am and 10 pm? Please specify. Are any measures being proposed to attenuate loud equipment?

The purpose of the Exploration and Testing Phase is to obtain information regarding the Huasna Oil Field reservoir in order to determine the commercial viability of oil production. The existing data regarding the reservoir's production capabilities are outdated and incomplete. The drilling, testing, and long-term production of the first four (4) wells will result in a better understanding of the reservoir's size, recoverability, native crude quality, and ability to produce a commercially viable product.

Drilling activities will occur on a 24/7 basis until the target depth has been reached and the well properly constructed. Once the well has been completed the well will be fitted with a pumping unit, engine, and temporary tank facilities. Testing will require the well to be tested on a 24/7 basis, similar to operations under a long-term production scenario. Pumps and engines will need to function on an ongoing basis however it is possible and practical to confine most other loud, noise generating activities to day time operating hours. Sound levels attributed to drilling, testing, and long-term operations have been explained in the previously provided supplemental acoustical report.

Kenai Drilling has measured the noise levels of well pump operations at 50 dB at a distance of 325 feet from the pump. Extrapolating this to the locations of the existing residences, and then reducing the number by 10 decibels to account for topographic blocking, the well operation sound level would be in the 28 to 30 dB range.

The activities at the staging area and shipping site are separated from the residences by a horizontal distance of -one half a mile and an additional vertical difference of one hundred feet. We have measured the sound a diesel truck makes when starting up from a "dead" stop at 78 decibels, measured at a 50 foot distance. At a distance of 2,500 feet, the sound level would be 44 dB. Reducing this by a minimum of 10 dB to allow for topographic shielding lowers the exposure estimate to less than 34 dB.

The noise levels for pumping operations and truck activities approximate the present ambient noise levels. Such noise levels are substantially below the noise limits set in the County's Land Use Ordinance. However, this is not to say that the sounds of drilling activities and future operations will be inaudible in the valley. The ability to distinguish a specific sound against a background of other sounds relates to its frequency and acoustic characteristics, as well as its

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intensity. With background levels in the 30 to 40 dB range, the sound of a pumping operation and truck movements at the 30 to 34 dB levels will be audible. Ordinary conversation takes place at around a 65 dB level so sounds at such low levels would not be considered disruptive - although mechanical sounds could be bothersome to people accustom to a very quiet setting. (*See David Dubbink Associates Noise Analysis, June 10, 2009 –page 13-14*)

Applicant proposed noise mitigation measures include:

- All noisy construction-related activities, which include the noise from the movement of medium to large trucks on the road, will only be allowed between 7 am and 9 pm on weekdays and 8 am and 5 pm for weekends.
- The truck operators will be instructed to use only the approved truck haul route.
- For the duration of the project, all potential noise-generating operational equipment, including well pumps, will be kept in good working order, which will include any repairs necessary to maintain equipment to operate at manufacturer's specifications for decibel levels.

(*See Supplement to the Application, July 22, 2009 – Section 3.11.5, page 72*)

16. Please explain the intent of the Nesbitt easement - it appears to be an alternate access road to Huasna Townsite Road.

The Nesbitt easement allows Excelaron access to the project site over the Mankins ranch property. The Nesbitt easement was signed between a mineral interest owner and the Mankins family prior to Excelaron's interest in the project. Excelaron's purchase of mineral interests from Ms. Nesbitt allows us to use the existing easement agreement, regardless of whether the easement's Annex II description of the access road is not accurate. Excelaron will not be creating any new roads or deviating from the stated access route. All vehicles associated with the site preparation and exploration activities will access the project site via State Hwy 166, Alamo Creek Road, existing roads on a private ranch (Porter Ranch access easement), Huasna Townsite Road, and existing roads on a private ranch (Mankins Ranch access easement). (*See Supplement to the Application, July 22, 2009 – Section 2.3.1, page 4*)

17. Please explain the water source for firewater tanks, as well as how they will be kept full (e.g., trucked in, well, etc.). Please clarify if processed water would be used for this purpose.

Three (3) 10,000 gallon water tanks, related piping, and hydrants will service the fire requirements of the project. These tanks will be filled from an offsite water source and delivered to the project on a backhaul in one of the vehicles accounted for in the supplemental traffic study. No additional truck trips are expected. Water levels within the tank will be monitored and replenished when required. Produced water will not be the source of water for the tanks. Produced water will not be exiting the processing facility other than to be disposed of down the

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injection well or used as part of the hot water flood EORM. (*See Cannon Facility Engineering Report, July 1, 2009 –page 6*)

18. Please clarify if 1000 bbl water tank is for potable water or processed water.

The 1000 bbl water tank listed in the equipment list (*See Cannon Facility Engineering Report, July 1, 2009 – Appendix A*) is part of the permanent facilities constructed to separate crude oil from produced water. This tank's function is described below.

Produced fluids entering the processing facility will be stored for a period of time within several tanks. The purpose of this storage is to facilitate the separation of crude oil and processed water from an emulsified state. As individual fluids are separated they will be collected into separate storage tanks prior to any additional processing. The following paragraph describes this process.

Well production and hot water injection will follow a balance rotating cycle. Each well will be produced for approximately three to five days. It will then be injected with hot water for one day, which is a process known as "hot water flooding"; this is used to heat the reservoir and sweep oil for better recovery. Overall, one (1) or two (2) wells will be injected with hot water while the balance of the wells are being produced in a given day. Excess produced water that is not injected for hot water flooding will be injected back into the formation through a water disposal well. Water injection to the disposal well will be set to match facility water production rates. Disposal pumps may run several times a day or for extended periods, depending on the number of operational production wells. (*See Cannon Facility Engineering Report, July 1, 2009 – page 4*)

Detailed Process Flow Diagrams (PDF's) of each well scenario can be found attached to the report. (*See Cannon Facility Engineering Report, July 1, 2009 – Appendix B*).

19. Please provide colors to be used for all equipment and tanks on well pad #2.

All equipment (e.g., storage tanks, oil pumps, etc.) left in place on the proposed Well Pad #2 for more than 30 days will be painted a dark, muted non-reflective color. *(See Supplement to the Application, July 22, 2009 – Section 3.2.3, page 18)* The specific manufacturer and color of the paint will ultimately be reviewed and approved by the County of San Luis Obispo.

20. On above-ground piping, please provide a description on how this would be installed. Please include a "reasonable worst case" discussion on the amount of grading expected and brush clearance area required. Also please describe the type of equipment needed to install piping and anchors. Please clarify if the estimated 71,500 square feet of disturbance includes the area required to install these pipes, as well as the 30-foot vegetation CalFire "clearance areas" around pads. If not, please amend the amount accordingly.

All piping and conduit is proposed above ground and adjacent to the existing roadway(s). Pipelines are typically secured to 18-inch sections of railroad ties, set slightly into the ground. The pipes will be held into place by 18 to 20-inch steel stakes. Pipelines connecting Well Pads 1,

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2, and the Shipping Site will traverse the existing road created by previous operations and be placed on the uphill side. Proposed pipelines will make use of natural contours and avoid all major vegetation, including trees. Should a circumstance present itself that major vegetation cannot be avoided, Excelaron will adhere to the County regulations for removal of trees. All CalFire requirements would also apply to pipeline installation. CalFire clearance requirements (i.e., 10 feet) would allow for safe pipeline placement, maintenance, and operation.

The proposed estimation of 71,500 square feet of disturbance (*See Question 25*) includes the estimated area required for pipelines.

21. Please discuss the drilling process in the context of how many "dry" holes you anticipate necessary to create one producing well with references to verify your explanation. Also, please explain what will be done with those dry holes to avoid connecting groundwater encountered with non-productive hydrocarbon-laden layers. If more than one hole is needed to establish a production well, has that been factored into the air quality modeling or noise assessment included in the submittal packet?

Excelaron does not anticipate drilling any “dry” holes. “Dry” holes are wells drilled in which no or little commercial quantities of crude is found. Considering the substantial costs and time associated with drilling a production well, it is in Excelaron’s best interest to place production wells in the location where they have the greatest chance of success.

In the event a dry well is drilled, the well will be properly plugged and abandoned in accordance with CDOGGR regulations. If a series of dry wells are drilled, it is quite likely that the project will cease and site cleanup will commence.

There a strict guidelines and regulations monitored by the CDOGGR that require each well to identify any ground water source, noting the depth intervals, as the well is being drilled. The well bore is then sealed with a layer of cement casing disrupting any connection with the groundwater source. CDOGGR requires that a casing be set to a minimum of 10% of the total well depth. For example, Excelaron’s initial new well will be drilled to a total depth of 4500 feet requiring at least 450 feet of cement casing. The areas of subsurface strata containing groundwater sources with potential for impacts from the project exist above 400 feet. The minimum casing depth for a 4500 well is 50 feet below that identified impact region. (*See Cleath-Harris Water Resource Impact Study, July 21, 2009 – page 7)* Once the casing has been set, drilling operations may continue to their final depth at which time a second layer of cement casing is set. All wells, production or injection, dry or productive, are created this way. (*See the attached diagrams – Attachment C*)

22. Assuming you reach 12 production wells, and then one or more stop producing sufficient quantities to continue operation, are you anticipating that a new county permit would be needed for the "13th" production well, or are you assuming that you are allowed to do additional drilling to get you back to twelve production wells?

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The Field Development Phase *(See Supplement to the Application, July 22, 2009 – Section 2.3.4, page 5)* states that at the end of a five (5) year period, Excelaron would anticipate that a maximum of twelve (12) production wells and one (1) reinjection/disposal well would constitute the total field development operations. This is not meant to imply that should one of the constructed production wells cease to operate, we would be entitled to drilling an additional well. If a new well(s) were sought a new Conditional Use Permit would be required.

23. Please provide official documents that provide a chain of title to the current mineral right owners of the two properties being proposed for oil well development. Please provide documentation that shows Excelaron is a lessor of these mineral rights and is authorized to act on the behalf of all lessors of these properties.

Only one (1) project parcel is proposed for drilling operations, 085-271-004. The project parcel is approximately 160.64 acres in size and contains all the areas of proposed development. Project parcel 085-271-001 was included because some improvements to the existing road may be required within that area. (*See Supplement to the Application, July 22, 2009 – Diagram located on the Title page)*

All short form mineral leases, deeds, or assignments for parcel 085-271-004 are attached hereto (*See Attachment D*) and have been recorded with the San Luis Obispo County Clerk.

Also attached (*See Attachment E*) is a chain of title to the current mineral right owners with official documentation noted. The official documents are public record and available at the County Clerk's office.

24. Access road specifies 15-foot width. CalFire typically requires a minimum of 16 feet. Please revise to 16 feet or provide document from CalFire stating 15-foot width is adequate.

Please see the attached correspondence from CalFire.

25. Please estimate the amount of cut and fill required, and if it is intended to balance onsite.

As proposed, the project will result in the disturbance of approximately 2.2 acres. All proposed areas of disturbance are within areas previously disturbed as a part of historic exploration programs dating as far back as the 1930's. To prepare the well pads, shipping site and roadways, approximately 71,850 cubic yards will be graded (46,370 cu. yd. of cut and 25,480 cu. yd. of fill) *(See Supplement to the Application, July 22, 2009 – Section 3.7.4, page 48)* The cut and fill activities are meant to balance onsite and no additional dirt will be imported. Any excess dirt will be used to create berms around the pads or level steep sections of the access road.

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We appreciate the opportunity to clarify these items for you, as it is extremely important to the project's success to have a clear, concise and accurate project description. Thank you in advance for your time and consideration. Please do not hesitate to contact us should you need any additional clarification.

Respectfully,
OASIS ASSOCIATES, INC.

C.M. Florence, AICP Agent
EXCELARON, LLC

Attachments: A – Alternative Truck Routes (3 pp)
B – Key Viewing Vegetation
C – Well Construction Diagrams (2 pp)
D – Mineral Leases
E – Chain of Title

Correspondence/Reports:

1. *Phase I Environmental Site Assessment, Huasna Valley Oil Field, Huasna Valley, San Luis Obispo County,* Stantec Consulting Corporation, September 23, 2009.
2. Correspondence from Patrick G. Mitchell, Downey/Brand, LP to Timothy McNulty, County Counsel, September 14, 2009.
3. *Response to Additional Information Request for the Excelaron Project,* Cleath-Harris Geologists, Inc., September 21, 2009.
4. Correspondence from CalFire to South County Team, July 27, 2007; to Kit Matlick/Excelaron, September 2, 2008; and email correspondence between C.M. Florence, AICP and Chad Zrelak, April 15, 2009.
5. *Addendum to Supplemental Floristic Inventory and Rare Plan Survey and Updated Oak Tree Impact Analysis,* Sage Institute, Inc., August 31, 2009.

c: G. Jagelman/Excelaron
K. Matlick/Excelaron
T. Cleath/Cleath-Harris
D. Wolff/Sage
P. Mitchell/DowneyBrand
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